Before the
**FEDERAL COMMUNICATIONS COMMISSION**
Washington, D.C. 20554

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| In the Matter of | ) | |
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| Amendment of the Commission's | ) | WT Docket No. 06-49 |
| Part 90 Rules in the 904-909.75 and | ) | |
| 919.75-928 MHz Bands | ) | |

## COMMENTS OF CITY OF RICHMOND, VIRGINIA DEPARTMENT OF PUBLIC UTILITIES

The City of Richmond, Virginia Department of Public Utilities ("DPU" or "Utility") hereby submits comments addressing issues raised in the Notice of Proposed Rulemaking ("NPRM") in the above referenced proceeding.[1] In the NPRM, the Federal Communications Commission ("FCC" or "Commission") asked for comments regarding proposed changes to the Commission's existing rules governing the licensing and use of frequencies in the 904-909.75 MHz and 919.75-928 MHz portions of the 902-928 MHz band. DPU believes that preserving the "safe harbor" provisions for unlicensed Part 15 devices is essential and that expanding the permissible uses of the licensed part of the band would undermine requisite interference protection for unlicensed Part 15 devices. Utilities and their customers rely on the 902-928 MHz band to promote the efficient supply and use of our nations most critical resources  electricity, gas and water.

DPU is a municipal natural gas, water, wastewater, and street light distribution company serving approximately 500,000 customers directly or

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[1] *In the Matter of Amendment of the Commission's Part 90 Rules in the 904-909.75 and 919.75-928 MHz Bands*, Notice of Proposed Rulemaking, WT Docket No. 06-49, FCC No. 06-24 (rel. March 7, 2006) ("NPRM").

indirectly in the Richmond, Virginia metropolitan area. DPU uses Itron's automatic meter reading ("AMR") technologies to monitor natural gas and water consumption for residential, commercial, and industrial customers served by it from remote locations. DPU has approximately 175,000 ARM devices installed, which has allowed it to achieve over $1M in annual operations and maintenance costs, render over 99% of its bills utilizing actual meter readings, and provide customers accurate and timely bills. These benefits, however, could well be lost if changes are made to the Part 90 multilateration Location and Monitoring Service ("M-LMS") rules that would pose an undue risk of interference to our AMR system[2]. For this reason, DPU opposes any changes to the LMS rules at this time.

## DISCUSSION

The NPRM seeks comment on whether the service and technical rules for M-LMS licensees should be modified. Specifically, the Commission asks whether it should expand the types of services that M-LMS licensees may offer beyond location based services, or alternatively whether to modify the rules to provide licensees with additional options in the use of the spectrum.[3] The Commission also seeks comment on whether it should modify the technical rules for M-LMS licensees by changing the allowed power levels or allowing frequency hopping and other modulation techniques.[4] Finally, the Commission requests comment on whether it

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[2] Itron's ARM devices operate at low power levels and short duty cycles in the 902-928 MHz unlicensed band.

[3] NPRM at ¶ ¶ 19-20.

[4] NPRM at ¶ ¶ 26-33.

should modify the Part 90 safe harbor rules that insulate unlicensed devices operating in the 902-928 MHz band.[5]

Given the amount of investment made by DPU in its AMR system and its reliance on the system to control energy resources, DPU opposes any change to the M-LMS rules. The FCC adopted the rules to allow for the co-existence of licensed and unlicensed devices, and to minimize the possibility of unlicensed devices being subject to harmful interference. DPU has relied on these rules in adopting use of its AMR system and believes that any rule change that risked an increase in harmful interference must be rejected out of hand.

The power levels at which our AMR system operates – like the power levels for all unlicensed devices in the 902-928 MHz band - are well below those permitted for M-LMS devices. When an AMR device and an M-LMS device are in proximity to one another, therefore, the AMR device will be exposed to potentially harmful interference. In adopting its rules for M-LMS, the Commission attempted to minimize the possibility of such harmful interference by restricting the uses of M-LMS systems, thereby limiting the number of M-LMS devices that were likely to be deployed.

Reducing maximum M-LMS power levels, or adopting other M-LMS interference reduction measures such as introducing spread spectrum technologies, by itself, would represent an improvement in the interference environment in which AMR systems operate. If the power levels for M-LMS devices remained above Part 15

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[5] NPRM at ¶ ¶ 36-41.

levels, however, and if such measures were accompanied by M-LMS service rule changes that made M-LMS devices more ubiquitous, then the net effect would be to expose AMR systems to many more devices capable of causing harmful interference than is true under the present rules. That is a trade-off we cannot afford.

Finally, DPU urges the Commission to retain the present safe harbor rules to insulate unlicensed Part 15 devices, including our AMR devices, from claims of interference.[6] DPU agrees with Itron and the Commission that there has been no change in circumstance that would warrant revisiting these rules. Moreover, a change in the rules might require Itron to redesign its AMR system, and the cost to utilities to purchase and implement a new AMR system might be prohibitive.

## CONCLUSION

For the foregoing reasons, DPU respectfully requests that the Commission retain the current Part 90 rules governing the licensing and use of frequencies in the 904-909.75 MHz and 919.75-928 MHz portions of the 902-928 MHz band.

Respectfully submitted,

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May 9, 2006

[6] *See* 47 C.F.R. § 90.361.